REMARKS

Claims 32, 35, 41-43 and 47 are allowed. Claims 1-5, 7, 8, 10-12, 20, 21, 23-30, 36-40, 44-46 and 48-51 are rejected. Claims 6, 9, 13-19, 22, 31, 33 and 34 are objected to. The Applicants amend claims 1, 6, 13, 17, 20, 22, 31, 33, 38, 39, 44, 45, 46, 48, and 49, cancel claim 9, and add claims 52-54. The Applicants add no new matter and request reconsideration.

Allowable Subject Matter

The Applicant thanks Examiner Shew for the allowance of claims 32, 35, 41-43, and 47. Claims 6, 9, 13-19, 22, 31, 33 and 34 were objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The Applicants have elected to rewrite claims 6, 9, 13, 17, 22, 31, and 33 in independent form to place claims 1-8, 10-19, 22, 31, and 33-34 in condition for allowance.

Claim Rejections – 35 U.S.C. § 112

Claims 48-50 are rejected to under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Applicants amend claims 48 and 49 to obviate the Examiner's rejections. For instance, the Applicants amended claim 48 as follows, "an ingress memory hub when the third interface is operating in an egress memory hub." This feature is clearly shown in Figures 1A, 1B, and 3, specifically referencing the control lines 19, and described in the specification as originally filed at the paragraph beginning on page 6, line 3, among others places. The Applicants have amended claim 49 to clarify a similar feature.

Claim Rejections – 35 U.S.C. § 102 & § 103

Claims 20, 21, 24, 36-38, 51 and 44-46 are rejected to under 35 U.S.C. § 102(e) as being anticipated by Chawla et al. (U.S. Patent No. 6,876,668). Claims 1-5, 8, 10-12, 23, 25-28, 30, 39 and 40 are rejected to under 35 U.S.C. § 103(a) as being unpatentable over Chawla in view of Merchant et al. (U.S. Patent No. 6,584,106). Claims 7 and 29 are rejected to under 35 U.S.C. § 103(a) as being unpatentable over Chawla and Merchant in view of Opalka et al. (U.S. Patent No. 6,259,699). The Applicants respectfully traverse the Examiner's rejections.

The Applicants amend claim 20 to include features similar to those the Examiner indicated as allowable in claim 9. Amended claim 20 recites *assigning egress flow Id values*

to the packets according to the associated ingress flows. According to the Examiner's comments, it appears the Applicants and Examiner are in substantial agreement that the claims, as amended, are novel and not obvious since Chawla clearly does not assign separate and distinct ingress and egress flow Id values to packets, much less assign the egress Id values according to the associated ingress flows.

To further crystallize the distinction over the prior art of record the Applicants additionally amend claim 20 to clarify that the output packets *include the egress flow Id values*. Support for these added features is provided by the specification as originally filed at paragraphs beginning on page 4, line 14 and page 13, lines 27, among other places. Chawla does not teach or suggest these additional features. There is no disclosure in Chawla of including any assigned values in packets 203, much less including the recited egress flow Id values. Nothing in Merchant or Opalka cures these deficiencies. Chawla therefore does not anticipate claim 20 or its corresponding dependent claims.

Claim 27 recites *assigning the Class of Service to the packets, modifying the assigned Class of Service*, and *assigning the modified Class of Service to the packets before being output*. The Examiner alleges Chawla's Flow ID labels 555 and packets 203-206 disclose the recited Class of Service and packets, respectively. According to the Examiner, Chawla's storing of packets 203-206 within entries 345 of queue 340-1 labeled with the Flow ID labels 555 discloses the recited assigning of the Class of Service to the packets. The Flow ID labels 555, however, identify the flow or session associated with packets 203-206, not the recited Class of Service of the packets 203-206. Chawla, col. 19, lines 38-41; col. 21, lines 11-36. That Chawla generates the Flow ID labels 555 in response to a bandwidth reservation scheme does not obviate the fact that the Flow ID labels 555 do not identify the recited Class of Service for that packet. Since the Flow ID labels 555 correspond to the flow or session of packets 203-206, not the recited Class of Service, Chawla does not anticipate claim 27.

Even assuming that the storing of packets 203-206 to queue entries 345 labeled with Flow ID labels 555 discloses the recited assigning of the Class of Service to the packets, Chawla teaches away from modifying the assigned Flow ID labels 555. For instance, once packets 203-206 are stored to the queue entries 345, Chawla teaches that the labeling of those entries 345 is to remain unchanged. Chawla, col. 22, lines13-15, where the bandwidth labeler 550 only labels or changes labels of queue entries 345 that do not already contain packets 203-206. Thus Chawla teaches away from modifying the assigned Flow ID labels 555 and assigning the modified Flow ID labels 555 to the packets 203-206, as the claims require. Chawla therefore does not anticipate claim 27.

The Applicants amend claim 38 to clarify that the communication between the memory hubs via the third interface is initiated by one of the memory hubs *in response to a packet flow backup corresponding to the initiating memory hub*. Support for this additional limitation is provided at paragraphs beginning on page 10, lines 3 and 11, among other places.

The Examiner alleges Chawla's data communications device 201 and network policy server 150 disclose the recited memory hubs. Neither data communications device 201 nor network policy server 150, however, disclose the recited *initiating memory hub*. The network policy server 150 unilaterally transmits commands 530 to data communications device 201 to permanently reserve bandwidth for a network-wide session or application, not in response to a backup at the network policy server 150. See Chawla, col. 14, lines 3-13. Chawla further does not teach or suggest network policy server 150 receiving any packet flows, much less initiating commands 530 in response to a backup of a packet flow. The network policy server 150 therefore does not disclose the recited *initiating memory hub*.

Data communications device 201 further does not disclose the recited *initiating memory hub*, as there is no disclosure in Chawla of the data communications device 201 initiating any communications with network policy server 150, much less in response to backup in the flow of packets 203. Even if Chawla included disclosure of two-way communication between the data communications device 201 and network policy server 150, Chawla teaches away from the data communications device 201 initiating communications in response to the recited packet flow backup. For instance, when confronted with a lack of storage space to store packets for a given session, Chawla's data communications device 201 either drops the packets corresponding to that session or queues them in unreserved memory locations. See, Chawla, col. 25, lines 11-31. Nothing in Chawla suggests initiating communications with the network policy server 150 in response to this lack of storage, nor how these communications would rectify the packet flow backup. Chawla therefore does not anticipate claim 38, or its corresponding dependent claims.

Amended claim 39 recites *a third interface for communicating with a traffic manager external to the memory hub, the traffic manager for directing the controller to dequeue packets from the memory*. There is no disclosure in Chawla of the recited traffic manager that is *external to the memory hub*, nor the recited third interface for communicating with the traffic manager. The Examiner alleges the combination of Chawla's data scheduler 320 and dequeuing mechanism 350 disclose the recited controller. The dequeuing mechanism 350, however, dequeues the packets 203-206 at periodic intervals, not in response to direction

from a device external to the memory hub. Chawla, col. 16, lines 58-65. Since Chawla does not disclose any device to direct the dequeuing mechanism 350 to dequeue the packets 203-206, much less the recited traffic manager that is external to the memory hub, Chawla does not anticipate claim 39.

The Applicants have amended claim 44 to clarify that the second interface outputs packets or packet fragments *to an egress packet processor for updating packet headers of the packets or packet fragments*. The Examiner alleges Chawla's output port 506 and packets 203 disclose the recited second interface and packets or packet fragments, respectively. There is no disclosure in Chawla, however, of updating any of the headers 180, 181, or 182 of packets 203; much less updating the headers 180, 181, or 182 after outputting the packets 203 through output port 506. Furthermore, the Examiner does not appear to allege, nor can Applicants ascertain at the time of this writing, where Chawla discloses the recited egress packet processor. Chawla therefore does not anticipate claim 44.

Amended claim 45 recites *the packets or packet fragments include a Class of Service value or a forwarding label value*. The Examiner alleges Chawla's packets 203 disclose the recited packets. Nothing in Chawla, however, discloses packets 203 including the recited Class of Service value or forwarding label value. Chawla therefore does not anticipate claim 45.

Amended claim 46 recites *a data structure that includes an egress flow Id value, a Class of Service value, and a forwarding label value*. The Examiner alleges Chawla's sender state data 504 discloses the recited data structure. Sender state data 504, however, does not include the recited egress flow Id value, Class of Service value, and forwarding label value. Chawla therefore does not anticipate claim 46.

New Claims

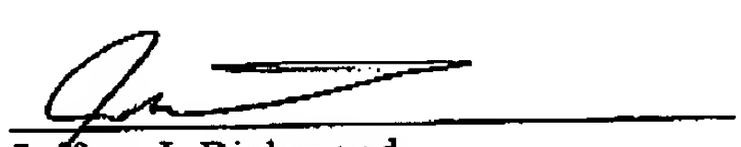
The Applicants add claim 52 which depends from claim 38. Support for these additional features is provided at paragraphs beginning on page 10, lines 3 and 11, among other places. The Applicants add claim 53 which depends from claim 39. Support for these additional features is provided at paragraphs beginning on page 4, line 1, among other places. The Applicants add claims 54-55 which depend from claim 44. Support for these additional features is provided in Figures 8-10 and their corresponding portions of the specification as originally-filed. There is no disclosure in Chawla, Merchant, or Opalka of the additional features presented in the new claims.

CONCLUSION

For the foregoing reasons, reconsideration and allowance of claims 1-8, 10-31, 33, 36-40, 44-46 and 48-55 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

MARGER JOHNSON & McCOLLOM, P.C.



Jeffrey J. Richmond
Reg. No. 57,564

MARGER JOHNSON & McCOLLOM, P.C.
210 SW Morrison Street, Suite 400
Portland, OR 97204
503-222-3613

Customer No. 20575